

IN THE SPECIFICATION:

Please amend paragraph number [0013] as follows:

[0013] The present invention also includes a method for designing a routing element. This method includes identifying a first plurality of terminals or bond pads and a remote, second plurality of terminals or bond pads that are to be electrically connected to one another. The locations of each terminal or bond pad of the first and second pluralities is then determined. Based on the locations of each corresponding pair or set of bond pads and/or terminals, the locations of contact pads and conductive traces of a routing element may be configured to facilitate connection of each corresponding pair of terminals and/or bond pads. The relative positions and orientations of the conductive trace locations may be configured to minimize electrical interference between adjacent conductive traces, with any structures of a substrate or semiconductor device that will underlie the conductive traces, or a combination thereof. In addition, the position of each conductive trace location, as well as the path of each conductive trace location, may be configured to ~~have~~ minimize its length while still addressing the foregoing concerns.

Please amend paragraph number [0027] as follows:

[0027] Base substrate 41 of routing element 40 may be formed from a dielectric material, such as a nonconductive polymer (*e.g.*, polyimide). In addition, base substrate 41 may comprise a flexible, substantially planar member, enabling base substrate 41 to conform somewhat to surfaces that are located at different elevations (*e.g.*, the different elevations of a multichip module). Alternatively, base substrate 41 may comprise a substantially planar member formed from any other dielectric material (*e.g.*, glass, ceramic, etc.) or at least partially ~~dielectric-coated~~ dielectric-coated semiconductor material.

Please amend paragraph number [0033] as follows:

[0033] Another embodiment of a routing element 140 is shown in FIGs. 3 and 4. Routing element 140 includes a substrate 141 and conductive traces ~~142a, 142b~~ 142 and contact pads 144a, 144b that are carried by substrate 141.

Please amend paragraph number [0042] as follows:

[0042] Conductive traces may extend across one or more layers of MCM substrate 20, as well as vertically through MCM substrate 20, between different wiring layers thereof. Each conductive trace facilitates the communication of electrical signals between at least first and second locations of MCM substrate 20, such as die attach locations 26 thereof, which locations correspond to the two ends of each conductive trace. At least one of the first and second locations between which each conductive trace extends may be positioned proximate a die attach ~~region~~ location 26 of MCM substrate 20.

Please amend paragraph number [0044] as follows:

[0044] Each semiconductor device 30 may be secured to a corresponding die attach location 26 of MCM substrate 20. Discrete conductive elements 36, such as bond wires, TAB elements, thermocompression bonded leads, or the like, may electrically connect and, thus, establish communication between bond pads 34 of each semiconductor ~~device~~ device 30 and their corresponding terminals 24 and, thus, corresponding conductive traces carried by MCM substrate 20. Both bond pads 34 and terminals 24 are also referred to herein as contact areas.

Please amend paragraph number [0045] as follows:

[0045] Alternatively, discrete conductive elements 36 may connect bond pads 34 of semiconductor devices 30 or terminals 24 of MCM substrate 20 to corresponding contact pads 44 (e.g., contact pads 44a, 44a", 44b of FIG. 7) of a routing element 40 positioned adjacent thereto. The connected bond pads 34 or terminals 24 may then communicate with corresponding, remote bond pads 34 or terminals 24 by way of conductive traces 42 of routing element 40.

Please amend paragraph number [0054] as follows:

[0054] A routing element 140, 140' extends through aperture 28''', with a first group of contact pads 144a, 144a' thereof being positioned proximate to one or both of terminals 24a of the first group and bond pads of a semiconductor ~~device~~ device 10''' secured to die attach region 26a'''. A second group of contact pads 144b, 144b', which are located at an opposite end of routing element 140, 140', are positioned proximate to one or both of terminals 24b or the second group and bond pads of a semiconductor ~~device~~ device 10''' secured to die attach region 26b'''. While connections between contact pads 144a, 144a', 144b, 144b' and their respective, corresponding terminals 24a, 24b or bond pads (not shown) are depicted as being made by way of discrete conductive elements 36 in the form of wire bonds, other types of discrete conductive elements 36, including, without limitation, TAB elements and thermocompression bonded leads, may be used to electrically connect contact pads 144a, 144b to terminals 24a, 24b or bond pads (not shown) that are facing in the same general direction.

Please amend paragraph number [0055] as follows:

[0055] Alternatively, contact pads 44a, 44b, 144a, 144b of any routing element (*e.g.*, routing elements 40, 40', 40'', 140, 140') incorporating teachings of the present invention may be positioned on top of their corresponding terminals 24a, 24b or bond pads (not shown) to facilitate bonding thereto by way of discrete conductive ~~elements~~ elements 36, such as thermocompression bonded leads, solder balls, or the like.